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REVIEW OF THE STATUS OF THE FIVE INTERNATIONAL LEGAL INSTRUMENTS GOVERNING OUTER SPACE

Note by the Secretariat

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INTRODUCTION

1. The General Assembly, upon the recommendation of the Committee on the Peaceful Uses of Outer Space, has so far adopted five international treaties and five sets of legal principles regarding the exploration and peaceful uses of outer space.

2. At its fortieth session, the Committee noted that the Legal Subcommittee had continued to conduct its informal consultations with a view to coming up with a list of annotated items agreed upon by consensus that could be considered by the Committee for possible inclusion in the agenda of the Subcommittee (A/52/20, para. 128). The Committee endorsed the recommendation of the Legal Subcommittee that, on the basis of its informal consultations, a new agenda item entitled "Review of the status of the five international legal instruments governing outer space", dealt with in document A/AC.105/C.2/L.206/Rev.1, should be included in the agenda of the Legal Subcommittee starting with its session in 1998.¹ The Committee agreed that, in order for the Legal Subcommittee to begin implementing the work plan contained in document A/AC.105/C.2/L.206/Rev.1, at its thirty-seventh session in 1998, the Secretariat should invite Member States to submit their views regarding the obstacles impeding the ratification of the five international legal instruments governing outer space.

3. The Secretary-General sent a note verbale dated 14 July 1997 to all Member States inviting them to communicate their views on the matter to the Secretariat by 1 October 1997. The replies would enable the Secretariat to prepare for submission to the Legal Subcommittee at its thirty-seventh session a compilation of the views of States regarding the obstacles that have impeded the ratification of the five international legal instruments governing outer space.

4. The present document was prepared by the Secretariat on the basis of information received from Member States by 20 February 1998. The document also provides a basic historical background on each of the five legal instruments, an analysis of the replies received on the matter as well as a selected bibliography of United Nations documents and other relevant information sources on the five instruments. Information received from Member States subsequent to 20 February 1998 will be included in addenda to the present document.

I. HISTORICAL OVERVIEW OF THE FIVE LEGAL INSTRUMENTS GOVERNING OUTER SPACE

A. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies

5. The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, otherwise known as the Outer Space Treaty, was adopted on 19 December 1966 by the General Assembly. At the time, a great many delegations expressed their views regarding the text of the Treaty. Primary among those views was that the Treaty represented an important step in the process of adopting peace-building agreements. Others also expressed regret that it was not possible to extend the terms of the Treaty to disarmament and nuclear disarmament. Many delegations felt that the Treaty represented only the first step in a step-by-step process towards advancing the rule of law into the realm of outer space. Other delegations expressed their concern about the Treaty not prohibiting nuclear weapons and weapons of mass destruction on the Moon because of omission of the word "Moon" from the first paragraph of article IV. Moreover, in their view, there was no provision for prohibition of military activities in outer space as well as the Moon. Those delegations hoped that by not having such specific phraseology, it would not give license for military activities in outer space and on the Moon. The Secretary-General, in congratulating the General Assembly on its work on the Treaty, noted that the "door is not yet barred against military activities in space" (A/PV.1499, p. 72), given the fact that space activities were already part of the arms race. In his view, space disarmament was only one segment of the broader problem of world peace and disarmament, and his hope was that States would come to realize that space activities should be solely peaceful activities.

6. The Treaty was opened for signature on 27 January 1967. Upon the deposit of instruments of ratification by five Governments, including the Governments designated as Depositary Governments under the Treaty (Russian Federation (formerly Union of Soviet Socialist Republics), United Kingdom of Great Britain and Northern Ireland and United States of America), the Treaty entered into force on 10 October 1967. The Treaty was the result of extensive negotiations in the Committee on the Peaceful Uses of Outer Space and the First Committee of the General Assembly. There are 93 ratifications and 27 signatures to the Treaty to date. Among the five legal instruments governing outer space, it has the most widespread adherence to its terms.

7. The deposit of instruments of ratification may entail the attachment of declarations. The Government of Brazil stated that it interpreted article 10 as a specific recognition that the granting of tracking facilities by the parties to the Treaty shall be subject to agreement between the States concerned. In the same vein, the Government of Madagascar stated that it understood that the provisions of article 10 should in no way affect the "principle of the national sovereignty of the State, which shall retain its freedom of decision with respect to the possible installation of foreign observation bases in its territory and shall continue to possess the right to fix, in each case, the conditions for such installation".

B. Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space

8. The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, otherwise known as the Rescue Agreement, was adopted by the General Assembly on 19 December 1967, exactly one year after the Outer Space Treaty. The roots of this Agreement can be found in article V of the Outer Space Treaty.

9. Article V of the Outer Space Treaty provided that "States Parties to the Treaty shall regard astronauts as envoys of mankind in outer space and shall render to them all possible assistance in the event of accident, distress or emergency landing on the territory of another State Party or on the high seas. When astronauts make such a landing, they shall be safely and promptly returned to the State of registry of their space vehicle."

10. Excerpts from this article were used in the preamble of the Rescue Agreement and expanded upon throughout the articles of the Agreement. In presenting the Rescue Agreement to the General Assembly, the Chairman of the Committee on the Peaceful Uses of Outer Space at that time remarked that the Rescue Agreement represented another major step forward in the elaboration of the Law of Outer Space and it was "in effect, implementing article V of the Outer Space Treaty" (A/PV.1640, p. 5). The Chairman of the Legal Subcommittee at that time noted that "the text reflects a carefully designed balance between the legitimate interests of the party on whose territory the search and rescue operations are conducted and those of the launching authority. It is, I believe, a notable achievement" (A/PV.1640, p. 6).

11. The Rescue Agreement was opened for signature on 22 April 1968 and entered into force on 3 December 1968 upon the deposit of instruments of ratification by five Governments, including the Governments designated as Depositary Governments under the Agreement (Russian Federation, United Kingdom and United States). There have been 83 ratifications and 25 signatures to date of the Rescue Agreement, making it the second-most-adhered-to instrument governing outer space activities.

C. Convention on International Liability for Damage Caused by Space Objects

12. The Convention on International Liability for Damage Caused by Space Objects, otherwise known as the Liability Convention, was adopted by the General Assembly on 29 November 1971 after significant negotiations in the Committee on the Peaceful Uses of Outer Space and its Legal Subcommittee. At the time of adoption by the Legal Subcommittee at its tenth session, it was noted that although some delegations did not object to having the text of the draft forwarded to the Committee for consideration, they were not able to support the text in the Subcommittee because they believed it would have been preferable to have incorporated provisions in the text on measure of compensation and especially settlement of claims more in accordance with those which they had earlier proposed with other delegations (A/AC.105/94, para. 24). Some delegations accepted the provisions on measure of compensation in view of the fourth preambular paragraph and other statements of clarification, but with regard to the provisions on settlement of claims, those delegations "maintained their dissatisfaction with the failure to adopt, without qualification in all cases, the rule that awards are binding, which would be the most effective guarantee for the benefit of the victim that proper compensation would be paid" (A/AC.105/94, para. 25). Later, during consideration of the draft Convention by the First Committee, those concerns were again raised. At that time, the First Committee "noted that every State is entitled, upon becoming a party to the Convention, to make a declaration that it will recognize as binding, in relation to any other State accepting the same obligation, the decision of a Claims Commission concerning any dispute to which it is a party. The Committee, furthermore, noted the hope expressed by Canada that many States would avail themselves of such an opportunity" (A/8528, para. 15). Thus, in many accession instruments, Governments, including that of Canada, recognized as binding, in relation to any other State accepting the same obligation, the decision of a claims commission concerning any dispute to which those States would become a party under the terms of the Convention.

13. The Liability Convention was opened for signature on 29 March 1972 and entered into force on 1 September 1972 following the deposit of the fifth instrument of ratification.

14. The Convention provided, in article XXVI, for the possibility of review 10 years after its entry into force or, in the alternative, after five years, at the request of one third of the States parties to the Convention and with the concurrence of the majority of States parties. Ten years later, in accordance with that article, the General Assembly, in its resolution 37/91, reviewed the Liability Convention and noted with satisfaction that at that point, 72 States had signed and 62 had ratified the Convention. The General Assembly, in the same resolution, reaffirmed the importance of the Convention and invited all States that had not yet done so to give urgent consideration to ratifying or acceding to the Convention. Currently, there are 76 ratifications of and 25 signatures to the Liability Convention.

D. Convention on Registration of Objects Launched into Outer Space

15. The Convention on Registration of Objects Launched into Outer Space, otherwise known as the Registration Convention, was adopted by the General Assembly on 12 November 1974. In presenting the draft Convention to the First Committee, the Chairman of the Committee on the Peaceful Uses of Outer Space proclaimed that it "was an indispensable instrument for ensuring that claims of innocent victims under the Liability Convention could be met promptly and effectively. It complements the body of rules provided by the Liability Convention, in the sense that it would facilitate procedures for identification of space objects in case of doubt. In that sense, the draft convention on registration is a significant contribution, we believe, to complement the existing body of international law in this field; hence it represents an important step forward in the progressive development and codification of international space law" (A/C.1/PV.1988, p. 7). The Chairman of the Legal Subcommittee echoed the views of the Chairman of the Committee and noted further that the draft convention would become "an important instrument in bringing harmony and order into the new domains of States activities in outer space; thus becoming, if I may say so, a set of traffic regulations for a growing number of countries engaged in the peaceful exploration of that new realm of human creativeness, which outer space has undoubtedly become" (A/C.1/PV.1988, p. 26).

16. The Registration Convention was opened for signature on 14 January 1975 and entered into force on 15 September 1976 upon the deposit of the fifth instrument of ratification and instrument of adhesion with the Secretary-General of the United Nations.

17. As with the Liability Convention, provision was made for review of the Convention after 10 years or five years at the request of one third of the States parties to the Convention with the concurrence of a majority of States parties, taking into consideration relevant technological developments, including those related to identification. After 10 years, in accordance with article X of the Convention, the General Assembly, in its resolution 41/66, considered the question of the review of the Convention on Registration of Objects Launched into Outer Space and recognized that in view of the considerable increase of activities in outer space, effective international rules and procedures concerning the registration of objects launched into outer space continued to be of great importance. It also reaffirmed the importance of the Convention and urged all States that had not yet done so, particularly those conducting space activities, to give urgent consideration to ratifying or acceding to the Convention in order to assure its broad application, and also urged international intergovernmental organizations that conduct space activities to declare, if they had not yet done so, their acceptance of the rights and obligations provided for in the Convention. In the same resolution, the General Assembly requested the Secretary-General to prepare a report on the past application of the Convention and to submit it to the Legal Subcommittee at its twenty-sixth session, for the information of Member States (A/AC.105/382).

E. Agreement Governing the Activities of States on the Moon and other Celestial Bodies

18. The Agreement Governing the Activities of States on the Moon and other Celestial Bodies, otherwise known as the Moon Agreement, was adopted by the General Assembly on 5 December 1979. The Moon Agreement was the result of significant discussions and negotiations in the Committee and its Legal Subcommittee. At its twenty-second session, the Committee established an informal working group to consider the matter on the basis of the recommendation of the Legal Subcommittee. After a series of discussions on several proposals made to amend the text of the draft treaty, the Committee determined that it had completed its work on the draft and decided to submit it to the General Assembly for consideration, final adoption and opening for signature.

19. The Moon Agreement was opened for signature on 18 December 1979. It entered into force on 11 July 1984, the thirtieth day following the date of deposit of the fifth instrument of ratification. To date, it has nine ratifications and five signatures, by far the least number of ratifications and accessions of all five international space legal instruments.

20. As with the Liability Convention and Registration Convention, provision was made for the review of the Agreement after 10 years or after five years upon the request of one third of the States parties to the Agreement and with the concurrence of the majority of States parties. According to article 18 of the Agreement, the review conference would consider the question of implementation of the provisions of article 11, paragraph 5, on international efforts to establish an international regime, including appropriate procedures, to govern the exploitation of the natural resources of the Moon, and taking into account in particular any relevant technological developments. The matter was placed on the agenda of the Committee, which recommended, in 1994 at its thirty-seventh session, that the General Assembly, at its forty-ninth session, in considering whether to revise the Agreement, should take "no further action at that time".² The reason for that recommendation was that, during the course of discussions in the Committee on the matter, the view had been expressed that, because the Agreement had a low level of ratifications and signatures, "any possible revision of its provisions should be conducted with prudence and only on the basis of consultations with all Member States".³ Therefore, the General Assembly took no action on the matter (see General Assembly resolution 49/34, paragraph 42).

21. Upon signing the Moon Agreement, the Government of France stated that "the provisions of article 3, paragraph 2, of the Agreement relating to the use or threat of use of force cannot be construed as anything other than a reaffirmation, for the purposes of the field of endeavour covered by the Agreement, of the principle of the prohibition of the threat or use of force, which States are obliged to observe in their international relations, as set forth in the United Nations Charter".

22. Of primary concern to States that have not ratified the Moon Agreement were the principle of the common heritage of mankind and the international regime, proposed in the Agreement, for the international management of Moon resources. In that regard, the provisions relating to the seabed regime of the United Nations Convention on the Law of the Sea of 10 December 1982, contained in Part XI of that Convention, have some analogies to those relating to the international regime proposed in the Moon Agreement. After several years of negotiations over controversial issues contained in that Convention, the General Assembly, by its resolution 48/263, adopted the Agreement relating to the Implementation of Part X of the United Nations Convention on the Law of the Sea of 10 December 1982, known as the 1994 protocol.* The Netherlands, in its reply (see section IV below) proposed consideration of similar arrangements modelled on the 1994 protocol, which did not alter the principle of the common heritage of mankind, but took the economic interests of the industrialized countries into account (thus encouraging formal accession to the Convention, as a possible way to promote greater ratification of the Moon Agreement).

II. ANALYSIS OF THE REPLIES RECEIVED

23. To date, nine States members of the Committee, as well as Germany, on behalf of member States of the European Space Agency (ESA) and other States having cooperation agreements with ESA** (in a working paper for the Legal Subcommittee (A/AC.105/C.2/L.211)), have replied to the note verbale of the Secretary-General and provided information on the five international legal instruments governing outer space. Of the nine, several are quite detailed and provide insight into the reasoning behind decisions to adhere or not to adhere to the instruments. As evidenced by the number of ratifications, almost all of the respondent Governments have

*The States Parties to the Agreement, noting the "political and economic changes, including market-oriented approaches", affecting the implementation of Part XI, and wishing "to facilitate universal participation in the Convention", considered that an agreement relating to the implementation of Part XI would "best meet that objective" (resolution 48/263, annex).

**The States on whose behalf Germany submitted replies were as follows: Austria, Belgium, Czech Republic, Denmark, Finland, France, Greece, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland and the United Kingdom of Great Britain and Northern Ireland.

ratified the 1967 Outer Space Treaty. That would add credence to the belief that the Outer Space Treaty, although viewed at the outset as broad and vague, represents an approach to the international regulation of outer space that has produced measurable results. Its original vagueness seems to have worked in its favour, as the Treaty has the flexibility to be interpreted and applied to different situations that might not have been envisioned when it was initially elaborated in the 1960s.

24. Of particular interest is the apparent willingness of States to bring the possibility of ratification and adherence to the attention of the appropriate decision makers for study and review. Thus, the very determination of the Committee to place on the agenda of the Legal Subcommittee an item on the review of the five international legal instruments governing outer space has given a certain momentum to the national re-examination of the provisions of those instruments with a view to ratification.

25. The responses from Member States, as well as from Germany on behalf of ESA member States, and other States having cooperation agreements with ESA, contain proposals on how to improve accession to the five treaties as well as specific action plans geared towards improving the status of existing law. Hence, there appears to be a recognition among Member States of the desirability of, and the need for, a discussion of the obstacles and problems that prevent States from ratifying the instruments. Through discussions in the Legal Subcommittee, it might be possible to create a climate of awareness of the issues and an understanding of the directions to be taken in order to facilitate ratification. This would seem to be the overall trend in all responses, as evidenced by those States endeavouring to analyse the issues and elaborate their reasoning on the acceptability or non-acceptability of the treaties. Overall, the responses submitted so far provide a good basis for discussions in the Subcommittee.

A. Reasons for non-ratification of, or non-accession to, a particular instrument or instruments

26. Among the nine responding member States and those States on whose behalf Germany submitted replies, a number of States (seven) have either ratified, acceded to or signed all five legal instruments, many have ratified or acceded to four of the instruments, others have ratified, acceded to or signed three instruments, still others have ratified, acceded to or signed two instruments, and one State has not taken any action on any of the legal instruments governing activities in outer space.

27. Reasons for non-ratification vary. A State that has ratified none of the instruments cites national law requirements that have prevented ratification. At the same time, that State has begun enquiries with the relevant local authorities in order to decide whether ratification would be feasible in the near future. States that have ratified, acceded to or signed four of the treaties have failed to ratify only the Moon Agreement for reasons extending from lack of interest on the part of States parties to the Agreement, to the fact that no activities are intended for the Moon that would justify ratification. One State that has not ratified the Moon Agreement expressed the hope that the replies on non-ratification would indicate why there was an apparent unwillingness on the part of States to ratify. That State hoped that the responses would provide an opportunity for an exchange of views on the matter, leading to an agreement on means of furthering the process of ratification.

28. Another respondent felt that the five legal instruments were conceived at a time when space activities were mainly State activities, whereas many activities are now carried out by international organizations and private entities. Therefore, in the view of that State, bilateral or restricted multilateral agreements and domestic legislation might be better suited for those activities. Hence, privatization of space activities and commercial uses might instead lead to the application of other international instruments to space activities.

29. In the view of another respondent, the lack of ratification could be traced to various sources, including the lack of a definition of outer space, the non-desire to acquire new responsibilities in the area of space law, the unwillingness to accept the declaration that the Moon is the common heritage of mankind and restrictions on military use of outer space.

30. Another respondent considered that in order to increase the number of parties to, and enhance the application of, international space law, two issues need to be addressed: the desirability and possibility of amendments to a treaty in order to improve the rate of ratification; and further discussion and a more precise elaboration of the provisions of a treaty that did achieve a satisfactory rate of ratification. In the view of that State, instruments of amendment should be used only in exceptional cases, while instruments establishing a more elaborate interpretation of existing principles would be preferred. In that sense, reference to the working paper submitted by Germany (A/AC.105/C.2/L.211) seems to be appropriate. In that text, it is proposed that the Registration Convention, as an important legal instrument in close relation to the Outer Space Treaty and the Liability Convention, should be clarified and possibly amended by texts reflecting experience with the Convention and new technological and legal developments. That would be accomplished through the discussion of four topics on the Convention and a three-year work plan in both the Legal Subcommittee and the Scientific and Technical Subcommittee.

31. On the whole, the lack of ratifications may be explained by a variety of reasons, but as a result of the replies received so far, it is apparent that discussions on ways to increase adherence to the instruments seem to be a viable option that might result in greater accession.

B. Ways of achieving the fullest accession to the five international legal instruments governing outer space

32. Of the replies received, only a few specifically dealt with the ways of achieving the fullest accession to the instruments. One State felt that discussions in the Legal Subcommittee could lead to an understanding of the problems that exist with regard to ratification, including objections, or other reasons. Another State felt that in order to encourage States to ratify the space treaties, some further ideas should be considered, including implementation of the Outer Space Treaty and a prescription that the Treaty should meet the interests of all States, taking into consideration the special needs of developing countries. Finally another State felt that by following the indicative schedule of work contained in document A/AC.105/C.2/L.206/Rev.1, progress could be made toward the objective of furthering ratification of the instruments. In the view of that State, following the third year of work, an international conference could be convened to examine the treaties and the obstacles preventing ratification.

33. Another respondent provided detailed suggestions on how to improve adherence to the treaties through discussion of vague provisions in the treaties with a view to establishing authoritative interpretations of the terms of the treaties at the international level. In the view of that State, such a process would facilitate effective, logical and coherent interpretations at the national level. With regard to provisions in the Outer Space Treaty, that State noted that they could apply to the delimitation of outer space. In that connection, a question arises with regard to article II of the Treaty providing for the special character of outer space as a legal realm. A definition or understanding of the geographical extent of national jurisdiction (as was done in the United Nations Convention on the Law of the Sea between territorial waters and other zones including the high seas) would go a long way toward pointing out to States the extent of their national responsibilities. With regard to the Liability Convention, the same State felt that a generally accepted and very broad definition of liable State or an amendment creating direct private liability would be necessary to prevent national authorities from applying their own interpretations of that Convention through national law. As for the Registration Convention, major issues will arise from space debris, in particular, how it is defined and identified. That might call for the establishment of a worldwide monitoring entity or the creation of an international guarantee fund. Either solution, in the view of that State, would require as additions to the Registration Convention amendments agreed upon by the Committee. With regard to the Moon Agreement, that State was of the view that amendment, or even replacement, of the Moon Agreement in the direction of agreements that took place in the Law of the Sea negotiations (such as the 1994 protocol) would be needed to improve its rate of adherence.

34. The work plan proposed in the working paper submitted by Germany (A/AC.105/C.2/L.211) has the goal of improving adherence to the Registration Convention. Its eventual goal is not to change the terms of the Registration Convention but to clarify the terms of the Convention through amendments in the form of General Assembly resolutions that would eventually be transformed into international law, for example, by an additional protocol to the Registration Convention, to be ratified by Member States.

III. REPLIES RECEIVED FROM MEMBER STATES*

Argentina

[Original: Spanish]

In connection with this subject, it should be recalled that Argentina is a party to:

1. The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, 1967;
2. The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, 1968;
3. The Convention on International Liability for Damage Caused by Space Objects, 1972; and
4. The Convention on Registration of Objects Launched into Outer Space, 1975.

With regard to the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, 1979, this instrument is being analysed by the various State bodies responsible for outer space matters in order to determine the expediency, advisability and possible implications of Argentina's accession (in accordance with the provisions of article 19 of the Agreement). To date, no drawbacks of substance have emerged from this study which would impede accession.

However, a further question arises which has to be borne in mind. Only nine States are parties to the Moon Agreement and only a further five States are signatories. This has probably given rise to a certain reluctance on the part of a large number of States to adhere to the Agreement. Argentina is therefore awaiting the replies of other States to the Secretary-General's request in order to acquaint itself with the fundamental reasons why they have to date not become parties to the Moon Agreement.

Once all the reasons put forward have been analysed, an exchange of ideas can take place with those States, with a view to finding appropriate means leading to a formula for achieving the greatest possible number of accessions. Such States will include both those which have no substantive objections and would therefore be willing to become parties if there were a considerable number of States also willing to do so, and also those which do have substantive objections and may possibly see a solution to the impediments to accession. This issue could be considered during the discussions of the Legal Subcommittee.

*The replies are reproduced in the form in which they were received.

Belgium

[Original: French]

For the purposes of the review by the Legal Subcommittee, at its 1998 session, of the status of the five international legal instruments governing outer space, I have the honour to inform you that Belgium has signed and ratified the following four instruments:

The 1967 Outer Space Treaty
The 1968 Rescue Agreement
The 1972 Liability Convention
The 1975 Registration Convention

Belgium has not, however, signed the 1979 Moon Agreement, since it considered it to be of no interest. This instrument has, in fact, been signed by some fifteen States only.

Canada

[Original: English]

Canada has signed and ratified the 1967 Outer Space Treaty, the 1968 Rescue Agreement, the 1972 Liability Convention, and the 1975 Registration Convention. Canada has not signed the 1979 Moon Agreement at this time, since Canada's Space Program does not, for the near future, provide for activities which would justify such action.

Colombia

[Original: Spanish]

We transcribe below the information supplied on this matter by the Office of Multilateral Organizations and Conferences of the Ministry of Foreign Affairs of Colombia:

1. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (27 January 1967, United Nations General Assembly resolution 2222 (XXI)): Colombia signed the Treaty on 27 January 1967 and to date has not become a party to it.
2. Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1967): Colombia is not a party to this Agreement.
3. Convention on International Liability for Damage Caused by Space Objects (1971): In accordance with the text of the Convention, Colombia has signed it but is not a party to it.
4. Convention on Registration of Objects Launched into Outer Space (12 November 1974, United Nations General Assembly resolution 3235 (XXIX)): Colombia is not a party.
5. Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (adopted by the General Assembly on 5 December 1979 and opened for signature in New York on 18 December): This Agreement has not been signed or acceded to by Colombia.

The Permanent Mission of Colombia also wishes to inform the Office for Outer Space Affairs that, to enable Colombia to become a party to the above-mentioned international legal instruments, it is necessary to fulfil the stipulations contained in articles 150-16, 189-2 and 241-10 of the Constitution of Colombia, which lay down that a treaty is not internationally binding on Colombia until it is adopted by a law of Congress, the Constitutional Court has ruled on its enforceability, and its consent to its adoption is definitively expressed by the deposit of the instrument of ratification or accession.

Moreover, the Ministry of Foreign Affairs of the Republic of Colombia has informed this Mission that the appropriate steps have now been initiated with the competent national bodies with a view to deciding on Colombia's becoming a party to these international instruments.

Indonesia

[Original: English]

A. Efforts of the Indonesian Government to ratify international space treaties

The Government of the Republic of Indonesia recognizes and respects the five international treaties relating to outer space, in particular the principles concerning the common interest of all countries and its peaceful purposes. To some extent, Indonesia applies those five space treaties as the basis of its space activities. In this connection, Indonesia has ratified two instruments of the five space treaties, i.e.:

- (a) Liability Convention, 1972, with the Presidential Decree Number 20, 1996;
- (b) Registration Convention, 1975, with the Presidential Decree Number 5, 1997.

Regarding the other three treaties, Indonesia's point of view can be described specifically as follows:

(a) *Space Treaty, 1967*. In general, the principles stipulated in Space Treaty 1967 have adequately governed activities of States in the exploration and use of outer space, including the Moon and other celestial bodies, such as the principles of peaceful purposes, non-national appropriation, benefits and interests of all States, environmental approach, common access to scientific investigation and international cooperation. Hence, principally, the Space Treaty, 1967, accommodates the particular interests and needs of the developing countries, most of which are still lacking in space technology capabilities. Nevertheless, Indonesia is still conducting a study of all related issues which might affect its national interest before ratifying this Treaty;

(b) *Rescue Agreement, 1968*. Concerning the ratification of Rescue Agreement, Indonesia is of the view that this Agreement in principle is in line with the national interest of Indonesia, in particular the principles of cooperation, responsibility and humanity. Therefore Indonesia is considering the possibility of ratifying this Agreement.

(c) *Moon Agreement, 1979*. Indonesia will further consider ratifying this Agreement after having ratified the Space Treaty, 1967, and the Rescue Agreement, 1968.

B. Ways and means of encouraging States to ratify international space treaties

The main problems that might impede States in ratifying the space treaties are related to the issues of their implementation. Most developing countries, including Indonesia, have the opinion that the implementation of these treaties is still beyond expectation. Indonesia is of the view that the implementation of the five space treaties is still not in accordance with the main purpose of such treaties. In addition, from the practical point of

view, States tend to use bilateral agreements as a basis for their related space activity cooperation, regardless of their status in relation to the space treaties.

In order to encourage States to ratify the space treaties, in particular the Space Treaty of 1967, the following main issues should be considered:

- (a) The implementation of the Space Treaty, 1967;
- (b) The Space Treaty, 1967, should meet the interests of all States, taking into consideration the special needs of developing countries.

Italy

[Original: English]

Italy is a party to the following international treaties governing outer space, which were elaborated by the Committee on the Peaceful Uses of Outer Space:

- (a) Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, of 27 January 1967;
- (b) Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, of 22 April 1968;
- (c) Convention on International Liability for Damage Caused by Space Objects, of 29 March 1972.

These treaties have been duly incorporated into Italian legislation (law 87 of 28 January 1970; presidential decree 965 of 5 December 1975; law 426 of 5 May 1976). Further regulation of liability issues is contained in law 23 of 25 January 1983 concerning procedure to be observed by Italian nationals claiming compensation and the quantum of damages caused by space objects.

The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, the Agreement on the Rescue of Astronauts and the Convention on International Liability for Damage Caused by Space Objects have obtained a wide acceptance and a large number of States, including all States involved in space activities, are parties to them. Since State practice has developed in conformity with the rules established by these treaties, they (or at least their basic provisions) may now be deemed to correspond to customary international law.

The obstacles impeding a larger endorsement of all the international instruments governing outer space may be determined by different reasons. The five United Nations treaties concerning outer space were conceived and stipulated at a time when space activities were essentially State activities, while in the present situation these activities are mainly carried out by international organizations and/or private entities. Therefore, bilateral or restricted multilateral agreements and domestic legislation are better suited for regulating the conduct of these actors.

Privatization of space activities and commercial uses of outer space have brought the international instruments concerning telecommunications, air law and trade law closer to the regulation of space activities. These circumstances should not be viewed as negative developments, since they are common features of international law nowadays. In the area of economic and commercial relations, the development of common principles and guidelines, in accordance with the norms laid down by the fundamental treaties, may be as

beneficial for the international community, as the elaboration of new binding instruments, or the acceptance of existing multilateral agreements.

Malaysia

[Original: English]

Please be informed that the Government of Malaysia is presently studying the above-mentioned treaties to establish the Government's position with regard to them.

The Government is also looking into the legal implications of ratification, including the enacting of local legal provisions.

Mexico

[Original: Spanish]

In response to the Secretary-General's invitation to Member States based on the request of the Legal Subcommittee, at its thirty-sixth session, for inclusion in its agenda of an item entitled "Review of the status of the five international legal instruments governing outer space", and for the purpose of presenting its views on the obstacles impeding ratification of the five instruments governing outer space, the Government of the United Mexican States wishes to make the following comments:

Mexico is party to the five international instruments governing outer space, namely:

Instrument	Date of ratification (R) and/or accession (A) by Mexico
Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (1967 Outer Space Treaty)	31 January 1968 (R)
Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1968 Rescue Agreement)	11 March 1969 (R)
Convention on International Liability for Damage Caused by Space Objects (1972 Liability Convention)	8 April 1974 (R)
Convention on Registration of Objects Launched into Outer Space (1975 Registration Convention)	1 March 1977 (R)
Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (1979 Moon Agreement)	11 October 1991 (A)

Under article 133 of the Constitution of the United Mexican States, these treaties constitute the supreme law of the land.

In the view of Mexico, the low rate of ratification by other countries of the five international instruments governing outer space may be attributable to any of the following reasons:

- (a) The lack of a definition as to where "outer space" begins. According to the different viewpoints:
 - (i) There are countries which consider such a definition necessary on account of future applications of international law, the protection of State sovereignty or the bases of national laws, and which propose seven or more criteria for such a definition, including the following:
 - a. The boundary of the atmosphere;
 - b. The limit of aircraft flight;
 - c. The point at which the atmosphere no longer sustains human life;
 - d. The lowest point at which a satellite can orbit;
 - e. The point at which centrifugal force replaces aerodynamic force;
 - f. The limit of a State's effective control over its airspace;
 - g. The current minimum orbit (approximately 100-110 km);
 - (ii) At the same time, there are countries which do not consider such a definition to be necessary on the grounds that no country has ever complained that another country has violated its outer-space airspace, that such a definition would be arbitrary and that the minimum altitude at which satellites can remain in orbit is far higher than the maximum altitude at which aircraft can fly;
 - (iii) Nevertheless, there may be countries which consider that treaties, conventions or similar agreements—such as that relating to the geostationary orbit—violate their sovereignty and even facilitate activities such as photography, videotaping or the tapping of communications on radio and microwave frequencies, which expose their activities to the public gaze with a concomitant violation of their rights;
- (b) The resolve not to assume new responsibilities in the area of space law. This reason is adduced because it is believed that certain countries are either unable or unwilling to assume, vis-à-vis the international community or other States, the responsibilities coming within the scope of application of the conventions, agreements and treaties in question;
- (c) The lack of consensus regarding the statement that the Moon is the heritage of mankind. Here, the argument is that the Moon, other celestial bodies and all the elements that make up the universe in general cannot be claimed to belong to a country. Likewise, there may be countries that feel themselves dispossessed of their rights to exploit the natural resources of the Moon and other celestial bodies since the States parties to the Treaty are required to share what they derive from the Moon equitably;
- (d) Restrictions on the military use of space. In this regard, it might be considered that there are States which are not in agreement with such restrictions because it might be simpler not to accede to the instruments in question and thus be able to undertake military activities in outer space without incurring international sanctions.

In view of the fact that greater and wider accession to the instruments is to be encouraged and in view also of the reasons why various States have not ratified the five international instruments governing outer space or have acceded only to one or some of them, Mexico believes it necessary to convene meetings or conduct activities in accordance with a phased schedule with the aim of reviewing the instruments. The intention of such meetings would not be to reopen substantive debate on the matter but to endeavour to overcome the various obstacles by emphasizing the collective interest.

Mexico welcomes the practical action taken in response to the Mexican initiative outlined in the final section of document A/AC.105/C.2/L.206/Rev.1, in which a series of measures is detailed for implementation over a period of three years:

(a) Activities during the first year: updating of the document "Status of international agreements relating to activities in outer space" and compilation of the views of States regarding the obstacles that have impeded their ratification;

(b) Activities during the second year: establishment of a working group to examine the comments submitted by States and to prepare recommendations on the measures to be adopted in order to achieve the fullest adherence to the instruments. The working group will draft a report containing those recommendations for submission to the Legal Subcommittee;

(c) Activities during the third year: on the basis of the recommendations of the working group, the Subcommittee will consider and implement, as appropriate, the measures considered adequate in order to achieve the objective sought by this initiative.

In addition, it should be possible in the fourth year to convene an international conference of Member States to examine the international instruments in this sphere in accordance with article 18 of the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (1979 Moon Agreement), which states that "... the Secretary-General of the United Nations, as depository, shall, at the request of one third of the States Parties to the Agreement and with the concurrence of the majority of the States Parties, convene a conference of the States Parties to review this Agreement." The Moon Agreement entered into force on 11 July 1984 and has been in existence for over thirteen years without an international conference having been convened.

Mexico considers that it would be appropriate, if a majority of States are in agreement, to convene such an international conference in the year 2001 in order to analyse the obstacles impeding ratification of the five international instruments governing the peaceful uses of outer space.

Netherlands

[Original: English]

With reference to the new item on the agenda of the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space entitled "Review of the status of the five international treaties governing outer space", as proposed by the Government of the Republic of Mexico and elaborated in document A/AC.105/C.2/L.206/Rev.1, of 4 April 1997, the present memorandum outlines a number of considerations of the Kingdom of the Netherlands for the purpose of the pertinent discussions in the Legal Subcommittee.

The five treaties in question are commonly referred to as, respectively, the Outer Space Treaty of 1967, the Rescue Agreement of 1968, the Liability Convention of 1972, the Registration Convention of 1975 and the Moon Agreement of 1979. All five treaties are presently in force. The respective numbers of ratifications and signatures are included in the aforementioned document.

A. The position of the Netherlands

The Netherlands itself is one of only seven States which are parties to all five of the treaties referred to.* Furthermore, the Netherlands has always upheld the value of international legal norms in international relations, as *inter alia* codified by means of treaties, and has consistently undertaken and supported efforts aimed at enhancing the effective and just operation of international law. Therefore, the fact that these treaties—especially the two last-mentioned ones—have achieved far from general global acceptance by means of ratification, is of considerable concern, and warrants a thorough analysis of the “how” and “why” thereof, as put into perspective by the Mexican proposal.

In the light of the ratification by the Netherlands of all five treaties, the point made subparagraph (a) of the work plan contained in the Mexican proposal does not require comment at this point, other than that the Netherlands would obviously support the collection of information regarding non-adherence as applicable to each individual State, this being a necessary prerequisite for a sensible approach to furthering the effective application of the existing body of space law. This memorandum focuses on the actions provided for in subparagraph (b) of the work plan, as they will have to be undertaken after the collection of information under subparagraph (a) has been concluded. Thus, the memorandum offers a few general comments on the ways to achieve more comprehensive acceptance, ratification and application of the five treaties.

B. General remarks

It is important to take the differences between the various treaties from the perspective discussed before into account. On the one hand, even the Outer Space Treaty, the oldest and most widely ratified of the five, counts only about half of the world's sovereign States as parties (with less than one-sixth as further signatories).** Yet, it should not be lost sight of that the one third remaining without any obligations towards this treaty essentially concerns two categories of States: States which have not yet undertaken or been substantially involved in any space activities, and States which have only recently been (re)established as independent political entities, and might presently have or perceive higher priorities than undertaking space activities and adhering to the relevant legal norms. In view of their measure of adherence and the composition of the body of parties, at least *prima facie* the same applies to the Rescue Agreement and the Liability Convention as well.

It is thus mainly with regard to the Registration Convention and (especially) the Moon Agreement that the question poses itself most prominently as to why the States which have not (yet) ratified these treaties have failed to do so. If the formulation of the point made in subparagraph (b) of the work plan is to be interpreted strictly, the largest effort should consequently be directed at these two treaties.

It is submitted, however, that the general enhancement of adherence to and application of international space law is more a matter of relative weight of two complementary needs. On the one hand there is, indeed, the need to discuss the desirability and possibility of, for example, amendments to a treaty in order to ameliorate the rate of ratification where this is perceived to be too low. On the other hand, however, there might also be a need to discuss further and more precise elaboration of the provisions of a treaty which did acquire a rate of ratification considered (at least for the time being) satisfactory. Such measure of ratification namely might

*The other six States are: Australia, Austria, Chile, Mexico, Pakistan and Uruguay.

**While a ratification under applicable international norms implies full acceptance by the ratifying State of all the rights and obligations included in the respective treaties (barring any explicitly-made and -accepted exceptions), signature without further ratification is generally conceived to imply for the State in question at least the duty not to defeat the object and purpose of such a treaty; in other words, not to clearly behave in contradiction with the general spirit and purpose of the treaty at issue. Thus, some general obligations may be deduced even for such a State in respect of that treaty.

largely be the result of the treaty's provisions being broadly and vaguely formulated, allowing considerable discretion even on important issues, so that working towards an effective uniform operation of space law rather than mere formal adherence to its terms would be the real issue.

As a last general remark, it is submitted that the point of departure of any discussion should be to amend the treaties to the smallest extent required. Such a perspective first of all is the most realistic one, in view of the procedural and other problems in getting amendments to existing law—in whatever form—generally accepted. More importantly, however, it should be remembered that the five treaties—especially the first three ones—have established within a short time-frame a workable, coherent and comprehensive, albeit often rough, legal framework for activities in space. Special care should be taken therefore not to throw away the baby with the bathwater.

For those reasons the instruments of amendment should be used only in exceptional cases; the instrument of establishing more elaborate interpretation of existing principles should generally be preferred. By means of formal declarations of such commonly agreed interpretations, the distinct possibility is established for the behaviour resulting therefrom to grow, with the passage of time and while adapting to the practicalities of space activities, into a rule of customary law. It will be obvious, that the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space, composed of a number of States seriously interested in the future of space activities and space law, is the most appropriate forum to undertake such an exercise.

C. The Outer Space Treaty

The Outer Space Treaty is the most broadly construed treaty on space activities, and it has therefore often been nicknamed the "Magna Carta" of outer space. Another nickname, the "Principles Treaty", already clearly points to the fact that the large majority of the provisions contained in it are broad and generally phrased principles, rather than specific and substantial legal rights and obligations.

Combining this feature with the rather comprehensive acceptance of the Outer Space Treaty as between the spacefaring nations,* this already provides ample reason not to consider formal amendments at this point in time. When it comes to further interpretation of the terms of the treaties, it is submitted that, as a matter of priority, one set of principles would deserve immediate attention, as it deals most prominently with the rapidly increasing participation of private enterprise in the conduct of space activities.

This development directly touches upon the public character of space law and the Outer Space Treaty as it stands, where the international responsibility and the international liability for space activities and their juridical consequences rest exclusively with the States, apparently even in cases of activities which are exclusively conducted by private entities. This gradual privatization of space activities has resulted in a (small) number of national laws, dealing with the consequences of private space activities under this international legal structure for the particular States concerned.**

*The only directly important case of a State missing amongst the parties to the Outer Space Treaty concerns Kazakhstan, which has the (Russian) launch base Bajkonour on its territory. Amongst those further absent from the list of parties and signatories the most noteworthy example are such States as Costa Rica, Croatia, Democratic People's Republic of Korea and Portugal, as well as a number of other former constituent parts of the Soviet Union and Yugoslavia.

**This concerns the United States, Sweden, the United Kingdom, Russian Federation and South Africa, and in addition (to a certain extent) the special case of France. National (or in the case of France semi-international) legislation has been established by those States, *inter alia*, providing for licensing systems vis-à-vis relevant private entities dealing amongst others with the international responsibility and liability of the licensing State for the activities of such licensees.

The point is, however, that on the international level the framework for such national legislation, as it is provided by the Outer Space Treaty, is far from clearly and unequivocally established. Article VI provides for the international responsibility of a particular State for "national" space activities, which, if privately conducted, require authorization and continuing supervision" by the "appropriate" State. Neither the term "national", nor the term "appropriate" have ever been conclusively defined at the international level. Yet, they basically define the scope of exercise of national jurisdiction for the purpose of making private enterprise adhere to the legal norms established at the international level.

A first consequence of the lack of definitional precision at the international level is that theoreticians are still discussing the proper interpretations of these terms. Much more importantly, however, also the pieces of national space(-related) legislation which have already been implemented have—largely unconsciously—provided their own interpretations, and, more importantly still, have done so in a rather varying fashion. Here, the Legal Subcommittee can play an essential role in enhancing the effective operation of international law. By providing for authoritative interpretations at the international level, effective, logical and coherent interpretations at the national level will be greatly facilitated.

A related problem arises with respect to the international liability for damage as established, in the first instance, by article VII. Since, however, this article has been elaborated extensively by means of the Liability Convention of 1972, further discussion of this issue will be referred to the relevant section of this Memo.

Another issue from this perspective concerns the provision of article VIII that the State of registration of a particular space object "shall retain jurisdiction and control" over that object. While the registration issue is further regulated by the Registration Convention and will be dealt with under that heading, with regard to the present item it could be helpful to make an inventory of the general measure of registration of space objects launched, and check whether in each particular case where private enterprise is substantially involved, care has been taken to exercise ("retain") the jurisdiction mentioned.

A final issue, possibly providing for an exceptional case requiring outright amendments, concerns the delimitation of outer space. It is true that a number of rules of international space law, either contained in the Outer Space Treaty itself or in the treaties building upon it, do apply regardless of where an occurrence takes place or a legally relevant entity is present. However, *inter alia*, from article II the special character of outer space as a legal realm (as distinct in particular from the realms of national airspaces and the airspaces over the high seas) clearly arises.

Reference should be made here to the long-standing discussions within the Legal Subcommittee and the opposition against formally establishing a boundary. Yet, when it comes to exercising legal control over private space activities, the geographical extent of national jurisdiction is an important, if not crucial determining factor. Establishing a boundary between airspaces and outer space, as it was done at repeated occasions in the law of the sea between the territorial waters and other zones, including the high seas, would therefore go a long way in pointing out to States the extent of their national responsibility in terms of controlling private enterprise.

D. The Rescue Agreement

As mentioned, the general remarks made pertaining to the Outer Space Treaty are substantially valid in the case of the Rescue Agreement also. Its rather wide measure of ratification* seems to call for care in

*The most important absentees from the list of parties and signatories would be Croatia, the Democratic People's Republic of Korea, Indonesia, Kazakhstan, Libyan Arab Jamahiriya, Saudi Arabia and Spain, as well as a number of African States and other former parts of the Soviet Union and Yugoslavia. It should further be reminded, that the Rescue Agreement is an unequivocal elaboration of especially article V of the Outer Space Treaty, so that those States not party or signatory

discussing any substantial change with regard to the treaty's obligations. Also, the relative lack of relevance in practical terms so far—apparently, little if indeed any legal dispute has arisen on issues covered by the Agreement—also make it difficult at this juncture to pinpoint clauses requiring further elaboration, whether by means of amendment or by means of generally accepted interpretations.

Finally, it should be pointed out that when it comes to the occurrences and actions which are regulated by the rescue Agreement—in sum, dealing with the treatment of astronauts and space objects found after an accident—these occurrences and activities essentially take place on earth or at sea.

To the extent the former is the case, they thus take place within the sovereign territorial jurisdiction of one State or another. That so many States have been willing to bind themselves to the obligations established under this Agreement which have to be fulfilled within their own sovereign territories, is already an important achievement, which should not be put in the balance lightly. *Mutatis mutandis*, the same would apply to rescue and salvage activities at sea and the obligations States have undertaken when confronted with astronauts and/or space objects in that area.

Further elaboration of their respective duties regarding astronauts and space objects which have suffered accidents would seem to further infringe on their individual sovereignty without real necessity (the relevant principles are relatively clearly established by the Agreement), as well as run the risk of bypassing national procedures and experience which might already be applicable, and leaving them useless or unused.

E. The Liability Convention

The same general remarks applicable to the Rescue Agreement *mutatis mutandis* also apply to the Liability Convention (in view of its large measure of ratification).^{*} Only the aforementioned fact that the Convention forms a clear elaboration of article VII of the Outer Space Treaty points to one important item for discussing changes to the present legal regime in view of the paramount developments regarding private involvement in space activities.

The Liability Convention in that capacity explicitly provides for a fourfold definition of the State(s) liable in case a space activity causes damage to another State or its entities. The definition operates through focusing on the launch of the space object causing the damage, and thus qualifies as liable States respectively: the State which launched the relevant space object, the State which procured that launch (in other words, caused it to occur, e.g. by paying for it), the State whose facility was used for that launch, and finally the State whose territory was used for that launch.

While this does seem to provide for a clear definition of who is to be considered liable in any given case (the Liability Convention in addition providing for regulations in cases where actually, under these different criteria, different States qualify as liable States), its operation in cases of private involvement is far from clear. What if not the officials of a State (or State agency or State organ) conducted the relevant launch, but employees of a private launch provider? Does this qualify the State whose nationals they are, or in the alternative the State

to the former, while on the contrary subject to obligations as a consequence of ratification or signature of the latter, will carry the burden of proof that the former Agreement does not constitute an elaboration, with customary legal force, of the latter Treaty.

^{*}Amongst those States which did neither sign nor ratify the Convention, Indonesia, Thailand, Tonga and Turkey are the most important in terms of space activities. Similar to the case of the Rescue Agreement, the Liability Convention essentially is an elaboration of one article—article VII—of the Outer Space Treaty: those States not party or signatory to the former, while on the contrary having ratified or signed the latter, will carry the burden of proof that the former Convention does not constitute an elaboration with customary legal force of the latter Treaty.

whose juridical national the private entity is (which might, but need not point to the same State), as the liable State? Or should, under this criterion, no State be considered the liable one? Could the Liability Convention then nevertheless, as if applying by proxy, make the launching entity directly and privately liable?

Similar problems may arise regarding private entities procuring launches, or offering their facilities for launch. Only on the issue of territory, no private entity could juridically "take the place" of a State, and at least one State could always be pinpointed as the potentially liable entity in case of damage. However, the project of Sea Launch is now well under way, and poised to conduct the first launches from the high seas—outside any State's territory in a legal sense!—in less than a year from now. Thus, the criterion of territory would no longer serve as a guarantee that at least one State would be obliged to compensate damage in applicable cases.

It seems that either a generally accepted and very broad definition of liable State or an amendment creating direct private liability would be necessary to prevent national authorities from applying, consciously or unconsciously, their own, far from harmonized interpretations by means of national law. Solving this problem should be given high priority, before more and more States will find themselves confronted with a need to issue national regulations vis-à-vis private enterprise without any authoritative international guidance as to its scope and contents.

F. The Registration Convention

The Registration Convention, chronologically the fourth in line of the space treaties, does enjoy only a much more limited number of ratifications and signatures than its three predecessors. Yet, also here it should not be left out of sight that the large majority of space powers does belong to this group.*

A real effort should be undertaken to collect and analyse information on reasons for non-adherence to this Convention, as its major aspect (enhancement of the identification of space objects) provides an instrument making much of space law's other provisions more effective and practicable. Preliminarily speaking, it seems quite probable that the large measure of military and national security interest in space activities will turn out to be the major obstacle to any more comprehensive adherence to this Convention. On the other hand, with the defusing of the cold war new opportunities could be seized to arrive at a relatively less important impact of these military and strategical issues on space activities, as is already evidenced in the remote sensing sector, where increasingly sensitive remote sensing data are being allowed on the open market.

Apart from the remarks made before on the issue of article VIII of the Outer Space Treaty, in respect of which especially article II of the Registration Convention forms an important additional aspect, the Registration Convention's major issue from the point of view of effective and consistent application concerns the issue of space debris. This issue is increasingly worrying both scientists and commercially oriented entities, as the growing amount of tiny objects in outer space will more and more obstruct both the scientific exploration and the commercial exploitation of outer space.

Legally speaking, the problem is usually phrased in terms of liability for the damage caused by such debris, which leads to three major problems to be solved. Firstly, the question arises to what extent space debris would still fall within the definition of "space object" or "component parts" thereof, so as to trigger application of the

*Among the States not parties to the Registration Convention, Brazil, Indonesia, Israel, Italy, Saudi Arabia, South Africa, Thailand Tonga and Turkey rank among the most notable spacefaring nations. Also, again the argument made *supra* applies, in the sense that the Registration Convention as an elaboration of article VIII of the Outer Space Treaty makes those States which are neither party nor signatory to the former, while on the contrary having ratified or signed the latter, carry the burden of proof that the former Convention does not constitute an elaboration with customary legal force of the latter Treaty.

Liability Convention in cases of damage. Here, providing for an authoritative international interpretation would certainly be an interesting option.

Secondly, the practical problem of identification has to be faced: in case a certain piece of space debris cannot be related to a specific space object, effective operation of the Liability Convention for the purpose of redeeming damage is precluded. More stringent and comprehensive application in practice of the Registration Convention would have positive results in this respect, but would never be able to solve the problem altogether.

This is where the third problem arises: how to deal with the damage caused by those pieces of debris which cannot be retraced to a certain space object and thereby to a certain launching State? Theoretically speaking, two options might be worthy of consideration and discussion in this respect. The preventive option would be to establish a worldwide monitoring entity, tracking debris not only in a more comprehensive fashion than is already the case, but also making these data available to all those potentially interested.

The other option would be to establish an international guarantee fund, similar to the one existing nationally in many countries with regard to road transport, which will compensate damage caused by unidentifiable space debris. The fund would be financed at least largely by the active spacefaring community, for example by an obligatory contribution to the guarantee fund for every individual launch in the form of a particular percentage of the launch cost.

It is obvious, that such elaborated additions to the existing body of space law would require most probably even more than an amendment, such as a distinct treaty or protocol. In terms of strategy, however, perhaps putting discussions of such proposals on the agenda of the Legal Subcommittee might serve as a push to arrive at least at other, less far-fetched and cumbersome additions required to enhance the effectiveness of space law vis-à-vis the growing problem of space debris.

G. The Moon Agreement

The Moon Agreement provides the exception to the rule in the sense that it is not only ratified by a very limited number of States, but that in addition these include no large and independently operating space powers.* In this particular regard, further action on enhancing adherence to international space law would, more than elsewhere, depend upon the results of the actions undertaken and the information collected under subparagraph (a) of the work plan. While awaiting such results, however, a few preliminary remarks may already be tentatively put forward.

In the light of the foregoing, it should not be totally excluded beforehand, that in respect of the Moon Agreement the enhancement of the adherence to a uniform body of international legal rules pertaining to outer space would be served best not by re-interpretation or even amendment of the Moon Agreement, but by discarding it and replacing it with an alternative agreement better able to achieve a large measure of consensus amongst the world's States.

*It is interesting to point out, however, that by contrast amongst the signatories to the Moon Agreement two major space powers are to be found: France and India. What the relevance of their signature is in view of the fact that it took place already a number of years ago, but that no visible efforts have been undertaken since to also ratify the Agreement, would be a matter of serious doubt. Contrary to the other treaties, the almost complete lack of ratification of the Agreement by the world's States will preclude any conclusion that the Moon Agreement would be endowed with some measure of customary legal force as an elaboration of the Outer Space Treaty with respect to a particular area (or number of areas) within outer space as a whole.

One major aspect which immediately catches the eye is that both the large majority of industrialized nations and the large majority of third world nations are not amongst the parties to the Moon Agreement. The absence of many States from the former category amongst the parties would probably be expected. There is a clear tendency of the Moon Agreement to preclude unobstructed commercial exploitation of the Moon's resources by means of the common-heritage-of-mankind principle. Application thereof would essentially lead to a system for sharing any benefits from such exploitation with the developing countries not participating themselves (because of a lack of financial and technical opportunities).

But for precisely that last reason the absence of many States from the latter category is quite surprising. As any effective application of the common-heritage-of-mankind principle to the Moon would result in a relatively beneficial position for the developing States at large, their almost comprehensive absence amongst parties (and signatories) would not seem to make sense. The work plan's actions under subparagraph (a) might well serve to bring more clarity into this, but already the present analysis will preclude justification of any attitude which lays the blame for non-adherence to the Moon Agreement squarely with the industrialized States.

The comparison with the developments in the law of the sea are telling from this point of view. The United Nations Convention on the Law of the Sea, concluded at Montego Bay, Jamaica, in 1982 after eight years of intensive discussions and negotiations, had to deal with the same problem with respect to the ocean floor. The relevant part of the Convention provided that the ocean floor would be the common heritage of mankind, and elaborated the application of that principle to any exploitation projected in practice in quite detailed fashion. This part was included largely against the resistance of industrialized States, for similar reasons as in the case of the Moon Agreement. This resistance grew ever stronger afterwards and resulted in a rather large lack of ratifications on their side.

At the same time, the Convention in other parts developed and codified many rules which were generally agreeable or even favourable to the industrialized States also (e.g. related to the territorial waters or the exclusive economic zones). When therefore the continuously growing number of ratifications on the side of the third-world States brought entry into force of the Convention (which was to occur one year after the sixtieth ratification)* ever nearer, pressure grew on the developed States. They had to find a solution which would preserve the manifold benefits they had to gain as parties to the Convention from entry into force of the other parts of the Convention, while precluding the application of this particular part to which they were so much opposed.

However, also the developing States were aware that entry into force of the Convention without a major measure of adherence amongst the industrialized States (after all, the ones closest to actually being able to exploit the ocean floor) would not be a desirable situation. Hence, a compromise was found in the end by adding a protocol to the Convention in 1994. In essence, the protocol preserved the principle of the common heritage of mankind and its application to the ocean floor, but gave industrialized nations—especially those actively involved in the exploitation project at issue—a much larger voice in the actual decisions implementing the principle and the relevant procedures in any given case.

To the extent that the information collected under subparagraph (a) of the work plan would lay bare similarities in attitudes, amendment or even replacement of the Moon Agreement in the relevant direction could well be based on the same approach as was the case with regard to the law of the sea.

*Note that the Moon Agreement entered into force already after the fifth ratification had occurred.

H. Conclusion

From the point of view of the Netherlands, the new agenda item represents a valuable effort, especially if interpreted not too strictly, to enhance the effective and uniform operation of international legal norms with respect to outer space and space activities. For practical reasons, the discussion should focus on a small number of important items at first. In determining the position of the Netherlands, the increase in private involvement in space activities and the growing risks presented by space debris are seen to present the two major problems requiring priority treatment.

While more detailed legal discussions and, ultimately, legal solutions will have to wait for the collection of relevant information, with respect to the treaties a few central issues for discussion have already been proposed. The Rescue Agreement was seen as not requiring immediate action. Thus, it is with respect to each of the other four treaties that the essential choice between formal amendment (in whatever form) or informal but authoritative harmonization of interpretation is further established.

In respect of the Outer Space Treaty and the Liability Convention, generally speaking the informal approach seems to provide the best chance at furthering the professed aim. For the Moon Agreement by contrast, a formal and rather extensive overhaul of its legal regime seems to be at issue. The Registration Convention finally would present a case for combining the two approaches: a formal addition to its legal regime coupled with more elaborate interpretations of a few key notions after a thorough further effort at collecting relevant information.

Notes

¹*Official Records of the General Assembly, Fifty-second Session, Supplement No. 20 (A/52/20), para. 130.*

²*Official Records of the General Assembly, Forty-ninth Session, Supplement No. 20 (A/49/20), para. 153.*

³*Ibid.*, para. 152.

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